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THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

New Hampshire College

—OF—

Agriculture and the Mechanic Arts.

At the session of the Legislature of New Hampshire in 1866, an Act was passed establishing the "NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND THE MECHANIC ARTS," on the basis of the Congressional Land Grant, and authorizing its location in Hanover, and connection with Dartmouth College.

In accordance with this Act, the Institution was organized under a Board of Trustees appointed partly by the Governor and Council, and partly by the Corporation of Dartmouth College, the authorized connection with Dartmouth College was effected, and the Institution is now in successful operation.

It is established upon a thorough English and Scientific basis, and its object is the "Liberal and practical education of the industrial classes in the several pursuits and professions in life." In Agriculture, the College aims to give, as far as can be taught in a school, all that bears directly or indirectly upon the subject. The text-book work is supplemented by courses of lectures delivered by practical farmers and specialists, upon subjects connected with Agriculture; also by the work and series of experiments carried on upon the College Farm. Numerous elective studies render the course well adapted to the wants of students who desire a preparation for active life. One class of these elective studies has reference to the Higher Mathematics, and their application to the Mechanic Arts; another class offers an extensive course in Chemistry, with reference to analysis of Agricultural products, Assaying, and the general application of Chemistry to the Arts.

The course of study consists of a first year divided into two terms and ending in April, and three full college years of three terms each.

There are also provisions for post-graduate students.

FACULTY.

Rev. SAMUEL C. BARTLETT, D.D., LL.D., President.
BENJAMIN T. BLANPIED, A.M., *Professor of Chemistry.*
Rev. HENRY G. JESUP, A.M., *Professor of Natural History.*
CHARLES H. PETTEE, A.M., C.E., *Professor of Mathematics.*
CLARENCE W. SCOTT, A.M., *Professor of the English Language and Literature.*
CHARLES M. WOODWARD, B.S., *Instructor in Agriculture.*

SAURIN J. BLANPIED, A.M., *Instructor in Elocution.*
THOMAS W. D. WORTHEN, A.M., *Instructor in Mathematics.*
CHARLES S. COOK, B.S., *Instructor in Drawing.*

Hon. JOSEPH B. WALKER, A.M., *Lecturer on Irrigation and Drainage.*
JAMES O. ADAMS, A.M., *Lecturer on Stock Breeding and Feeding.*
W. H. HILLS, Esq., *Lecturer on Fruit Culture.*

CHARLES H. PETTEE, A.M., C.E., *Acting Superintendent of the College Farm.*

STUDENTS.

RESIDENT GRADUATES.

Name.	Residence.	Room.
Bigelow, Frank Landor, B.S.,	*Proctorsville, Vt.,*	C. H. 13.
Burleigh, Robert Fletcher, B.S.,	*Franklin, N. H.,*	Mr. Ticknor's.
Megrath, William Augustus, B.S.,	*Cavendish, Vt.,*	C. H. 13.

SENIOR YEAR.

Name.	Residence.	Room.
Comings, Ernest Smith,	*Lee, N. H.,*	C. H. 10.
Davis, Fred Carlos,	*So. Reading, Vt.,*	C. H. 2.
Foster, Sylvester Miller,	*Riverhead, L. I.,*	C. H. 7.
Kimball, Herbert Harvey,	*Hopkinton, N. H.,*	Prof. Blanpied's.
Mann, Moses Bisbee,	*Benton, N. H.,*	C. H. 8.
Moore, George Milton,	*Plymouth, Vt.,*	C. H. 2.
Norris, Ziba Amherst,	*Lyme, N. H.,*	Prof. Blanpied's.
Thompson, Edwin Chapin,	*Lee, N. H.,*	C. H. 10.

JUNIOR YEAR.

Adams, George Ellsworth,	*Weston, Vt.,*	A. H. 5.
Alden, Ruel Seabury,	*Lyme, N. H.,*	A. H. 5.
Angier, Walter Eugene,	*West Swanzey, N. H.,*	C. H. 5.
Bailey, Edward Alonzo,	*West Swanzey, N. H.,*	C. H. 5.
Bickford, Phillips Greenleaf,	*Lyme, N. H.,*	C. H. 1.
Brill, Andrew Walter,	*Riverhead, L. I.,*	C. H. 7.
Emerson, Frank Jay,	*Epping, N. H.,*	C. H. 8.
Fogg, Jerry Currier,	*Deerfield, N. H.,*	C. H. 4.
Hazen, Allen,	*Hartford, Vt.,*	A. H. 2.
Mullins, George Mayo,	*Londonderry, N. H.,*	C. H. 12.
Wood, Albert Henry,	*Lebanon, N. H.,*	C. H. 9.

SECOND YEAR.

Crossman, Edgar Orin,	*Plymouth, Vt.,*	A. H. 1.
Currier, William Sprague,	*Norwich, Vt.,*	A. H. 2.
Davis, Frank Albert,	*South Lee, N. H.,*	C. H. 15.
Hall, Jesse Fisk,	*Hinsdale, N. H.,*	C. H. 15.
Harvey, James Ellsworth,	*Surry, N. H.,*	C. H. 6.
Osborne, Chester,	*Edgartown, Mass.,*	A. H. 6.
Mathews, Alfred Elmer,	*Norwich, Vt.,*	A. H. 1.
Spofford, Walter Henry,	*South Groveland, Mass.,*	A. H. 6.
Thurber, Madison Templeton,	*Mast Yard, N. H.,*	C. H. 12.
Wason, Edward Hills,	*New Boston, N. H.,*	C. H. 6.
Wood, George Pillsbury,	*Lebanon, N. H.,*	C. H. 9.

FIRST YEAR.

Bickford, Fred Henry,	*Hanover, N. H.,*	C. H. 17.
Gerrish, Edwin Chandler,	*Mast Yard, N. H.,*	C. H. 12.
Gould, Frank William,	*Etna, N. H.,*	A. H. 4.
Hurlbutt, Horace Elijah,	*Hanover Center, N. H.,*	Mr. Davison's.
MacPherson, Levi Elmer,	*Hanover Center, N. H.,*	A. H. 4.
Ruevsky, Belezar Stoinoff,	*Sistova, Bulgaria,*	C. H. 11.

NOTE.—With the present year a change has been made from a course of three years to one of four. In accordance with this the entering class has been divided into two sections, and students are catalogued as First Year or Second Year, according to preparation.

SUMMARY.

Resident Graduates,	3
Senior Year,	8
Junior Year,	11
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ADMISSION.

Candidates for the First Year must present testimonials of good moral character, and must pass a satisfactory examination in Arithmetic, English Grammar, Geography, and United States History.

Candidates for the Second Year will also be examined in Algebra to Quadratics, Plane Geometry, English Language and Composition, Ancient History, Physiology, and Book-keeping.

Students coming from Academies or High Schools will be admitted without examination in certain studies, on the certificate of their respective Principals that they are fully prepared in these, but examinations will be required in every study not specially mentioned.

COURSES OF INSTRUCTION.

MODERN LANGUAGES AND ELOCUTION.

PRESCRIBED COURSES.

First Year.

1. Elocution. *Fifteen exercises.*
2. Rhetoric (A. S. Hill). Themes. *Twenty-five hours.*
3. English Language (Lounsbury). Themes. *Twenty-six hours.*

Second Year.

4. Elocution. *Fifteen exercises.*
5. Forensics before the class. *Ten hours.*
6. Themes in History. *Fifteen exercises. Included in History* 3.
7. Forensics before the class. *Fifteen hours.*

JUNIOR YEAR.

8. Elocution. *Fifteen exercises.*
9. Rhetoric (A. S. Hill). Themes. *Thirty hours.*
10. French Grammar (Eugène). Selections from contemporary French Authors. *Fifty-five hours.*

SENIOR YEAR.

11. Elocution. *Fifteen exercises.*
12. English Literature (Shaw). *Fifty-five hours.*

Forensics before the College.

ELECTIVE COURSES.

SENIOR YEAR.

13. English Literature (Taine). *Thirty hours.*

Course 13 *is elective with Chemistry* 5.

14. American Literature. *Forty hours.*

Two studies are elected from Course 14, *Agriculture* 9 *and* 10, *Chemistry* 7, *and Mathematics* 14.

POLITICAL SCIENCE.

PRESCRIBED COURSES.

SECOND YEAR.

1. Laws of Business (Parsons). *Thirty-five hours.*

SENIOR YEAR.

2. Constitutional Law (Pomeroy). *Forty hours.*
3. Political Economy. *Forty hours.*

ELECTIVE COURSE.

SENIOR YEAR.

4. International Law (Woolsey). *Forty-four hours.*

For Courses elective with this, see Agriculture 8.

HISTORY.

PRESCRIBED COURSES.

FIRST YEAR.

1. History of Greece (Smith). *Forty-two hours.*
2. History of Rome (Leighton). *Forty hours.*

SECOND YEAR.

3. Mediæval and Modern History (Thalheimer). *Sixty hours.*
4. Political History of the United States. *Seventeen hours.*

BOOK-KEEPING AND DRAWING.

PRESCRIBED COURSES.

FIRST YEAR.

1. Book-keeping (Bryant and Stratton). *Thirty-five hours.*

SECOND YEAR.

2. Free Drawing (Chapman). *Fifty hours.*

JUNIOR YEAR.

3. Mechanical Drawing. *Thirty hours.*

MATHEMATICS, PURE AND APPLIED.

PRESCRIBED COURSES.

FIRST YEAR.

1. Algebra. *Ninety-three hours.*
2. Plane Geometry (Olney). *Fifty-five hours.*

SECOND YEAR.

3. Algebra (Quimby). *Seventy-five hours.*
4. Solid Geometry (Olney). *Fifty-four hours.*
5. Plane and Spherical Trigonometry (Olney). *Fifty hours.*
6. Surveying (Murray). *Thirty hours.*

JUNIOR YEAR.

7. Surveying. Field work. *Thirty exercises (four hours each).*
8. Elementary Mechanics (Wood). *Sixty hours.*
9. Roads, Streets, and Pavements (Gilmore). *Twenty hours.*

SENIOR YEAR.

10. Bridge Construction. *Twenty exercises.*

ELECTIVE COURSES.

JUNIOR YEAR.

11. Workshop Appliances (Shelley). *Twenty hours.*
12. Descriptive Geometry; Shades, Shadows and Perspective; Spherical Projections (Church). *Sixty-four hours.*

SENIOR YEAR.

13. General Geometry and Calculus (Olney). *Forty-four hours.*
14. General Geometry and Calculus (Olney). *Forty hours.*

Courses 11–14 *are open only to students of the Mechanic Arts Courses. See Agriculture.*

PHYSICS AND ASTRONOMY.

PRESCRIBED COURSES.

JUNIOR YEAR.

1. Elementary Physics (Gage). *Sixty-six hours.*

SENIOR YEAR.

2. Lectures on Physics. *Twenty hours.*
3. Astronomy (Newcomb and Holden). *Fifty-five hours.*

CHEMISTRY.

PRESCRIBED COURSES.

JUNIOR YEAR.

1. Inorganic Chemistry. *Fifty-seven hours.*
2. Organic Chemistry. Recitations and Laboratory work. *Forty exercises.*
3. Analytical Chemistry. Qualitative Analysis. Laboratory work. *Twenty exercises (two hours each).*

SENIOR YEAR.

4. Analytical Chemistry. Qualitative Analysis. Laboratory work. *Thirty exercises (two hours each).*

ELECTIVE COURSES,

5. Analytical Chemistry. Quantitative Analysis. Laboratory work. *Thirty exercises (two hours each).*

   Course 5 is elective with English 13.

6. Analytical Chemistry. Quantitative Analysis of Soils, Fertilizers, etc. Laboratory work. *Forty-four exercises (two hours each).*

   For Course elective with this, see Agriculture 8.

7. Analytical Chemistry. Quantitative Analysis. Assay of Ores. Laboratory work. *Forty exercises (two hours each).*

   For Courses elective with this, see Agriculture 10.

NATURAL HISTORY.

PRESCRIBED COURSES.

FIRST YEAR.

1. Physiology (Hutchison). *Twenty-six hours.*
2. Physical Geography. *Twenty-eight hours.*

SECOND YEAR.

3. Zoölogy (Orton). *Fifty hours.*
4. Insects Injurious to the Farm (Treat). *Thirty hours.*
5. Botany (Gray, Lessons and Manual). Field work. *Fifty exercises.*

JUNIOR YEAR.

6. Structural Botany (Thomé). *Thirty-six hours.*
7. Sanitary Science. *Twenty hours.*

   Course 7 is classified here for convenience.

SENIOR YEAR.

8. Geology (Le Conte). *Fifty hours.*
9. Mineralogy. Laboratory work. *Thirty exercises (two hours each).*
10. Meteorology (Loomis). *Thirty hours.*

AGRICULTURE.

PRESCRIBED COURSES.

See also Chemistry and Natural History.

FIRST YEAR.

1. Introductory Lectures. *Ten hours.*
2. History of Agriculture. *Sixteen hours.*

JUNIOR YEAR.

3. How Crops Feed (Johnson). *Twenty-four hours.*
4. Stock Feeding and Breeding (Miles). Lectures. *Twenty hours.*
5. Drainage and Irrigation. Lectures. *Twenty hours.*
6. Fruit Culture. Lectures. *Twenty hours.*

Courses 3–6 *are not prescribed for students in the Mechanic Arts Courses. See Mathematics* 11 *and* 12.

ELECTIVE COURSES.

SENIOR YEAR.

7. Forestry (Hough). *Twenty-four hours.*
8. Veterinary Science. Lectures. *Twenty hours.*

Two studies are elected from Courses 7 *and* 8, *Mathematics* 13, *Political Science* 4, *and Chemistry* 6.

9. American Dairying (Arnold). *Twenty hours.*
10. Market and Landscape Gardening. *Twenty hours.*

Two studies are elected from Courses 9 *and* 10, *Chemistry* 7, *Mathematics* 14, *and English* 14.

Additional Lectures on various subjects connected with Agriculture.
A Biblical exercise, for all the classes, is attended on Sunday afternoons.

EXAMINATIONS.—There will be an examination whenever a subject is completed, and at the end of each term. All examinations will be written, excepting those at the end of the year, which will be oral, and in the presence of a Committee appointed by the Faculty.

ORDER OF STUDIES.

The *morning* exercise takes place on Tuesdays, Wednesdays, Thursdays, Fridays, and Saturdays, from 8:10 A. M. to 9:00 A. M. The *forenoon* exercise takes place on Mondays, Tuesdays, Wednesdays, Thursdays, Fridays, and

Saturdays, from 11:00 A. M. to 12:00 M. The *afternoon* exercise takes place on Mondays, Tuesdays, Thursdays, and Fridays, from 5:00 P. M. to 6:00 P. M.

NOTE.—In the accompanying scheme of the Order of Studies, courses are placed at the hour and in the order of their occurrence, with elective courses in brackets.

FIRST YEAR.

FIRST TERM.

MORNING. Book-keeping (Book-k. 1). Greek History (Hist. 1).

FORENOON. Algebra (Mathematics 1).

AFTERNOON. Agriculture. Rhetoric (Eng. 2). Physiology (Nat. Hist. 1).

SECOND TERM.

MORNING. Geometry (Mathematics 2).

FORENOON. English Language (Eng. 4). Roman History (Hist. 2).

AFTERNOON. Physical Geography (Nat. Hist. 2). Agriculture (Agr. 2).

SECOND YEAR.

FIRST TERM.

MORNING. Modern History; Political History (Hist. 3 and 4).

FORENOON. Algebra; Geometry (Mathematics 3 and part of 4).

AFTERNOON. Forensics (Eng. 5). Zoölogy (Nat. Hist. 3).

SECOND TERM.

MORNING. Drawing (Drawing 2).

FORENOON. Geometry; Trigonometry (Math. 4 finished, and 5 begun).

AFTERNOON. Entomology; Botany (Nat. Hist. 4, and 5 begun).

THIRD TERM.

MORNING. Forensics (Eng. 7). Laws of Business (Pol. Sci. 1).

FORENOON. Trigonometry; Surveying (Math. 5 finished, and 6).

AFTERNOON. Botany (Natural History 5 finished).

JUNIOR YEAR.

FIRST TERM.

MORNING. Mechanics (Math. 8). Sanitary Science (Nat. Hist. 4).

FORENOON. Botany (Nat. Hist. 6). Chemistry (Chem. 1).

AFTERNOON. Surveying (Math. 7). Rhetoric (Eng. 9).

SECOND TERM.

MORNING. French (Modern Languages 10).

FORENOON. Physics (Physics 1).

AFTERNOON. { How Crops Feed; Stock (Agriculture 3 and 4).
Workshop; Descriptive Geometry (Math. 11 and 12).

THIRD TERM.

MORNING. Mech. Drawing (Draw. 3). Roads (Math. 9).

FORENOON. Chemistry (Chemistry 2 and 3).

AFTERNOON. { Drainage; Fruit Culture (Agriculture 5 and 6).
Descriptive Geometry (Mathematics 12 finished).

SENIOR YEAR.

FIRST TERM.

ORNING. Geology; Mineralogy (Natural History 5 and 6).

FORENOON. English Literature (Eng. 12). Law (Polit. Sci. 2).

AFTERNOON. Chemistry (Chem. 4). { Chemistry (Chem. 5).
Eng. Literature (Eng. 13).

SECOND TERM.

MORNING. Astronomy (Astronomy 3).

FORENOON. Polit. Econ. (Polit. Sci. 3). { Forestry; Vet. Sci. (Agr. 7 and 8).
General Geometry (Mathematics 13).

AFTERNOON. { Chemistry (Chemistry 1).
International Law (Polit. Sci. 4).

THIRD TERM.

MORNING. Bridges (Math. 10). Meteorology (Nat. Hist. 10).

FORENOON. Polit Econ. (Polit. Sci. 3). { Dairy; Garden (Agr. 9 and 10).
General Geometry (Mathematics 14).

AFTERNOON. { Chemistry (Chemistry 7).
American Literature (Eng. 14).

PRIZES.

I. THE SMYTH PRIZES.—Hon. FREDERICK SMYTH of Manchester, N. H., offers two prizes to the Senior and Junior classes, one of *twenty* and the other of *ten* dollars, for the best essays on subjects connected with Agriculture or the Mechanic Arts; also three prizes, one of *twenty*, one of *fifteen* and one of *ten* dollars, for excellence in Oratory, open to the upper classes; also two prizes, one of *fifteen* and one of *ten* dollars, to the two lower classes for Reading.

II. JESUP PRIZES.—Professor JESUP offers to the class in Botany two prizes amounting to *twenty* dollars for the best two Herbariums.

III. ALUMNI PRIZES. The Alumni Association offers two prizes to the Senior class, one of *fifteen*, the other of *ten* dollars, for the best essays upon some subject connected with Political Economy.

DEGREE.

The Degree of *Bachelor of Science* will be conferred upon those who complete the entire course, and pass the final examination. Each candidate for a degree must prepare a thesis on some subject relating to Agriculture or to the Mechanic Arts.

BUILDINGS, APPARATUS AND FARM.

CULVER HALL.—Culver Hall is a brick building, four stories in height, and contains a large chemical laboratory, recitation and lecture rooms, and rooms for the various museums and cabinets.

CONANT HALL.—Conant Hall, also of brick, contains on the ground floor and in the rear extension a large boarding establishment. The three upper stories are devoted to rooms for students. There is a smaller building near it, called Allen Hall, in which, also, are rooms for students.

STATE MUSEUM.—A State Museum of General and Applied Science has been established. The specimens accruing from the State Geological Survey have been devoted to this Institution by the Legislature. Various contributions have also been made by persons interested in this object, and others are solicited.

CHEMICAL LABORATORY.—The Chemical Laboratory is commodious, well lighted and ventilated, and is furnished with appliances for instruction in General, Analytical and Agricultural Chemistry.

LIBRARY.—The Library belonging to this Institution contains about two thousand volumes, chiefly of valuable scientific works. The students have access to the Library of Dartmouth College upon the same terms as the students of that Institution.

INSTRUMENTS AND APPARATUS.—The College is provided with approved instruments for practical surveying, and with apparatus for illustration The students have, also, the benefit of the Observatory and the valuable philosophical apparatus belonging to Dartmouth College, and attend the lectures upon Physics.

STATE FARM.—The farm, consisting of 360 acres of valuable land in the immediate vicinity of Culver Hall, was presented by the late Hon. JOHN CONANT, of Jaffrey. It is in a high state of cultivation, is well suited for the purposes of agricultural experiment, and is provided with new and model farm buildings. It also furnishes opportunity to the students for remunerative labor.

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PECUNIARY AID AND EXPENSES.

PECUNIARY AID.—Thirty-four Scholarships, twelve for the State and twenty-two for Cheshire County, will furnish the tuition for an equal number of students. Assistance can be given to a limited number of young men who intend making agriculture their profession.

Monitorships, Janitorships, work on the Farm, etc., furnish additional assistance to a limited extent.

EXPENSES.

Tuition,	$30 00		$30 00
Room-rent,	10 00	to	20 00
Board, from $2.75 to $3 per week, for 38 weeks,	104 50	to	114 00
Fuel and lights,	7 00	to	10 00
	$151 50		$174 00

Room-rent, fuel and lights are estimated on the supposition that two students occupy the same room.

With the advantages of scholarship aid, necessary expenses, exclusive of clothing, will not exceed one hundred and thirty dollars a year, and with economy this sum may be reduced to one hundred dollars.

Incidental expenses, such as books and stationery, furniture, expenses in societies, travelling expenses, etc., vary according to circumstances and the character and habits of the individual.

☞ For further information, address President BARTLETT, or Professor B. T. BLANPIED, Hanover, N. H.